UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/652,008	08/28/2003	Kevin M. Tresenriter	108412	9890
27148 7590 01/27/2009 POLSINELLI SHALTON FLANIGAN SUELTHAUS PC 700 W. 47TH STREET			EXAMINER	
			MEINECKE DIAZ, SUSANNA M	
SUITE 1000 KANSAS CITY, MO 64112-1802		ART UNIT	PAPER NUMBER	
			3692	
			MAIL DATE	DELIVERY MODE
			01/27/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)			
Office Action Comments	10/652,008	TRESENRITER, KEVIN M.			
Office Action Summary	Examiner	Art Unit			
	Susanna M. Diaz	3692			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).					
Status					
1)⊠ Responsive to communication(s) filed on <u>02 O</u>	ctober 2008.				
	action is non-final.				
<i>;</i> —	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is				
	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.				
·	,				
Disposition of Claims					
 4) Claim(s) 2-67 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) is/are allowed. 6) Claim(s) 2-67 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement. 					
Application Papers					
9)☐ The specification is objected to by the Examiner.					
10)☐ The drawing(s) filed on is/are: a)☐ acc	epted or b) \square objected to by the E	Examiner.			
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).					
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.					
Priority under 35 U.S.C. § 119					
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 					
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 4) Interview Summary (PTO-413) Paper No(s)/Mail Date 5) Notice of Informal Patent Application Paper No(s)/Mail Date 6) Other: See Continuation Sheet.					

Continuation of Attachment(s) 6). Other: Requirement for Information under 37 CFR 1.105.

Art Unit: 3692

DETAILED ACTION

1. This non-final Office action is responsive to Applicant's response filed October 2, 2008.

Claims 2-67 are presented for examination.

Claim Rejections - 35 USC § 112

- 2. The following is a quotation of the second paragraph of 35 U.S.C. 112:
 - The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 3. Claims 2-67 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 2 recites a method for trading in a market between a trading exchange and a trading system, yet the preamble recites various instances of electronically processing or transmitting messages. It is not clear what the scope of involvement of a machine is. Does a machine merely transmit information in the form of messages or is there some analysis performed on the information itself? Does "processing" merely require enough functionality to instruct a network to transmit the message or is deeper analysis of the specific data transmitted required? Also unclear is the scope of "determining" (e.g., determining if the update flag is set, determining a price for a quantity). Again, are these determinations merely based on retrieving the right data or is there deeper analysis of the specific data?

Application/Control Number: 10/652,008

Page 3

Art Unit: 3692

Further regarding claim 2, the second step (i.e., the receiving a plurality of second messages step) requires the second messages to be received while processing the first message, which means that the update flag in the third step is always going to be set. This in turn means that conditions will be met to trigger "skipping and not processing each order price change information of the plurality of second messages at the trading system" and "transmitting a third message from the trading system requesting current market information from the exchange system." Does this mean that none of the order price change information from the second messages is processed? Alternatively, is only certain price change information from one or a subset of the second messages processed? If only certain price information is processed, how it is determined which price information to process and what is the extent of processing of the price information? Is it merely updated or is analysis performed on the price information to yield further derived data? It is not clear what is occurring in these steps.

Claim 2 fails to define the content of the first message at the trading system.

What is the nature of the content of the first message? Additionally, the data from the first through fifth messages is never explicitly used to perform further analysis that requires this specific type of data; therefore, the data appears to be non-functional.

Effectively, claim 2 recites a system that sends five messages back and forth. It is not clear what the functional constraints attributed to claim 2 are. Claims 3-10 impart some functionality to the current market information since a price is calculated based on the current market information; however, this does not remedy the non-functional nature of the remaining data recited in independent claim 2.

Claim 2 recites that the method is "operable using at least one processor"; however, this recitation is limited to the preamble and it is not clear in the body of the claim what the extent of involvement of the processor is, especially regarding core steps of the invention (including specific calculation steps, such as the price calculation recited in dependent claims 3-10).

Claims 11-15 recite similar limitations as those found in claims 1-10; therefore, the same rejections apply.

Claims 16-23 recite similar limitations as those found in claims 1-10; therefore, the same rejections apply.

Claim 24 recites similar limitations as those found in claims 1-10; therefore, the same rejections apply.

Claims 25-33 recite similar limitations as those found in claims 1-10; therefore, the same rejections apply.

Claims 34-43 recite similar limitations as those found in claims 1-10; therefore, the same rejections apply. Furthermore, it is not clear what the metes and bounds of a "snapshot view of the market" are. How is a trade performed "according to a snapshot view of the market" (as recited in independent claim 34)? Also, claim 34 recites that the "software application [is] stored in memory of the system"; however, the memory is not explicitly set forth as a system element. Therefore, it is not clear if the memory itself is meant to be a limiting element within the scope of claims 34-43. Also unclear is the scope of "performing at least one trade at the trading system." Is the trade actually

Art Unit: 3692

executed? Also, if the trade is executed, is it executed by the trading system or merely at the trading system (e.g., by a user inputting data at a trading system terminal)?

Claims 44-67 recite similar limitations as those found in claims 1-10 and 34-43; therefore, the same rejections apply.

Appropriate correction is required.

Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 2-67 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

A claimed process is eligible for patent protection under 35 U.S.C. § 101 if:

"(1) it is tied to a particular machine or apparatus, or (2) it transforms a particular article into a different state or thing. See Benson, 409 U.S. at 70 ('Transformation and reduction of an article 'to a different state or thing' is the clue to the patentability of a process claim that does not include particular machines.'); Diehr, 450 U.S. at 192 (holding that use of mathematical formula in process 'transforming or reducing an article to a different state or thing' constitutes patent-eligible subject matter); see also Flook, 437 U.S. at 589 n.9 ('An argument can be made [that the Supreme] Court has only recognized a process as within the statutory definition when it either was tied to a particular apparatus or operated to change materials to a 'different state or thing' '); Cochrane v. Deener, 94 U.S. 780, 788 (1876) ('A process is...an act, or a series of acts, performed upon the subjectmatter to be transformed and reduced to a different state or thing.'). A claimed process involving a fundamental principle that uses a particular machine or apparatus would not pre-empt uses of the principle that do not also use the

Art Unit: 3692

specified machine or apparatus in the manner claimed. And a claimed process that transforms a particular article to a specified different state or thing by applying a fundamental principle would not pre-empt the use of the principle to transform any other article, to transform the same article but in a manner not covered by the claim, or to do anything other than transform the specified article." (*In re Bilski, 88 USPQ2d 1385, 1391 (Fed. Cir. 2008*))

Also noted in *Bilski* is the statement, "Process claim that recites fundamental principle, and that otherwise fails 'machine-or-transformation' test for whether such claim is drawn to patentable subject matter under 35 U.S.C. §101, is not rendered patent eligible by mere field-of-use limitations; another corollary to machine-or-transformation test is that recitation of specific machine or particular transformation of specific article does not transform unpatentable principle into patentable process if recited machine or transformation constitutes mere 'insignificant post-solution activity." (*In re Bilski*, 88 USPQ2d 1385, 1385 (Fed. Cir. 2008)) Examples of insignificant post-solution activity include data gathering and outputting. Furthermore, the machine or transformation must impose meaningful limits on the scope of the method claims in order to pass the machine-or-transformation test. Please refer to the USPTO's "Guidance for Examining Process Claims in view of *In re Bilski*" memorandum dated January 7, 2009,

http://www.uspto.gov/web/offices/pac/dapp/opla/documents/bilski_guidance_memo.pdf .

It is also noted that the mere recitation of a machine in the preamble in a manner such that the machine fails to patentably limit the scope of the claim does not make the claim statutory under 35 U.S.C. § 101, as seen in the Board of Patent Appeals

Informative Opinion Ex parte Langemyr et al. (Appeal 2008-1495),

http://www.uspto.gov/web/offices/dcom/bpai/its/fd081495.pdf.

While claims 2-67 recite many steps of transmitting data electronically or processing data at a machine, the mere transmitting of, storing of, and retrieval of data is deemed to be insignificant post-solution activity. Also, as discussed above in the rejection under 35 U.S.C. § 112, 2nd paragraph, the scope of processing is unclear; therefore, a broad interpretation of "processing" might merely involve putting the data in a format to be stored, transmitted, or retrieved. While claim 3 recites calculation of a formula to determine a price, it is not clear that this calculation is explicitly performed by a machine (e.g., as opposed to the calculation being performed by a human user, with or without nominal assistance from a machine). Claims 2-67 are not tied to a particular machine or apparatus nor do they transform a particular article into a different state or thing, thereby failing the machine-or-transformation test; therefore, claims 2-67 are non-statutory under § 101.

Appropriate correction is required.

Because claims 2-67 are so indefinite, no art rejection is warranted as substantial guesswork would be involved in determining the scope and content of these claims.

See In re Steele, 305 F.2d 859, 134 USPQ 292 (CCPA 1962); Ex parte Brummer, 12 USPQ 2d, 1653, 1655 (BdPatApp&Int 1989); and also In re Wilson, 424 F.2d 1382, 165 USPQ 494 (CCPA 1970). Prior art pertinent to the disclosed invention is nevertheless cited on the attached PTO Form 892 and Applicant is reminded they must consider all cited art under Rule 111(c) when amending the claims to conform with 35 U.S.C. § 112.

Art Unit: 3692

Requirement for Information under 37 C.F.R. § 1.105

1. Applicant and the assignee of this application are required under 37 CFR 1.105 to provide the following information that the examiner has determined is reasonably necessary to the examination of this application.

The information is required to extend the domain of search for prior art. Limited amounts of art related to the claimed subject matter are available within the Office, and are generally found in class 705 and subclasses 36R and 37, which describe trading systems. A broader range of art to search is necessary to establish the level of knowledge of those of ordinary skill in the claimed subject matter art of In response to this requirement, please provide the citation and a copy of each publication that any of the applicants relied upon to develop the disclosed subject matter that describes the applicant's invention, particularly as to developing the messaging details of the claimed invention. For each publication, please provide a concise explanation of the reliance placed on that publication in the development of the disclosed subject matter. Applicant's provisional application discusses how the invention is based on the existing Intercontinental Exchange (ICE). The Examiner is particularly interested in which aspects of Applicant's invention are inherent to or derived from the capabilities of the ICE and which aspects of Applicant's invention are Applicant's improvements thereof. For example, has the ICE typically operated using a message based system? Which features in the claimed invention correspond to Applicant's specific improvements over traditional prior art methods/systems of executing ICE transactions?

Art Unit: 3692

It is also requested that Applicant and Assignee provide information regarding any related products or services in the art of trading, especially in regard to trading systems that operate based on electronic message transmissions.

2. The fee and certification requirements of 37 C.F.R. § 1.97 are waived for those documents submitted in reply to this requirement. This waiver extends only to those documents within the scope of this requirement under 37 C.F.R. § 1.105 that are included in the applicant's first complete communication responding to this requirement. Any supplemental replies subsequent to the first communication responding to this requirement and any information disclosures beyond the scope of this requirement under 37 C.F.R. § 1.105 are subject to the fee and certification requirements of 37 C.F.R. § 1.97.

The applicant is reminded that the reply to this requirement must be made with candor and good faith under 37 CFR 1.56. Where the applicant does not have or cannot readily obtain an item of required information, a statement that the item is unknown or cannot be readily obtained will be accepted as a complete response to the requirement for that item.

Conclusion

3. This requirement is an attachment of the enclosed Office action. A complete response to the enclosed Office action must include a complete response to this

Art Unit: 3692

requirement. The time period for reply to this requirement coincides with the time period for reply to the enclosed Office action, which is THREE (3) months.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susanna M. Diaz whose telephone number is (571) 272-6733. The examiner can normally be reached on Monday-Friday, 8 am - 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kambiz Abdi can be reached on (571) 272-6702. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Susanna M. Diaz/ Primary Examiner, Art Unit 3692

/Kambiz Abdi/ Supervisory Patent Examiner, Art Unit 3692